

Title (en)

METHOD FOR DEFINING A PROHIBITED VOLUME FOR A SURGICAL ROBOTIC SYSTEM

Title (de)

VERFAHREN ZUR DEFINITION EINES VERBOTENEN VOLUMENS FÜR EIN CHIRURGISCHES ROBOTISCHES SYSTEM

Title (fr)

PROCÉDÉ POUR DÉFINIR UN VOLUME INTERDIT POUR UN INSTRUMENT CHIRURGICAL ROBOTIQUE

Publication

EP 4162893 A1 20230412 (EN)

Application

EP 21306401 A 20211006

Priority

EP 21306401 A 20211006

Abstract (en)

The invention relates to a method for determining a prohibited volume for a surgical robotic system comprising a control unit, a robotic arm (102) and an end-effector (105) adapted to treat a region of interest of a patient's body, comprising:- implementing a first path of a motorized C-arm (403) supporting an X-ray source (401), an X-ray image detector (402) and an anti-collision device (404), said first path comprising at least two different angular positions around a rotation axis of the C-arm;- at each angular position of the C-arm along said first path, detecting with the anti-collision device an external surface of the patient's body and recording volumetric data of a patient's body portion enclosing the region of interest;- computing a volumetric model of the patient's body portion based on said volumetric data;- sending the volumetric model to the control unit of the surgical robotic system,- based on said volumetric model, defining a prohibited volume (V1, V2, V3) for the robotic arm and end-effector.

IPC 8 full level

A61B 34/10 (2016.01); **A61B 34/20** (2016.01); **A61B 34/30** (2016.01); **A61B 34/32** (2016.01); **A61B 34/37** (2016.01); **A61B 90/00** (2016.01)

CPC (source: EP)

A61B 34/10 (2016.02); **A61B 34/20** (2016.02); **A61B 34/30** (2016.02); **A61B 90/03** (2016.02); **A61B 90/361** (2016.02); **A61B 34/32** (2016.02); **A61B 34/37** (2016.02); **A61B 2034/105** (2016.02); **A61B 2034/2051** (2016.02); **A61B 2034/2055** (2016.02); **A61B 2034/2063** (2016.02); **A61B 2090/08021** (2016.02)

Citation (applicant)

WO 2017064287 A1 20170420 - SURGIVISIO [FR]

Citation (search report)

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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 4162893 A1 20230412; WO 2023057472 A1 20230413

DOCDB simple family (application)

EP 21306401 A 20211006; EP 2022077621 W 20221005